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APPLICATION NO. FILING DATE FIRST NAMED INVENTOR ATTORNEY DOCKET NO. 09/622, 082 09/22/00 KINNUNEN J 990.1234

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STEINBERG & RASKIN 1140 AVENUE OF THE AMERICAS NEW YORK NY 10036 EXAMINER

LOPEZ,C

ART UNIT PAPER NUMBER 1731

DATE MAILED:

08/01/01

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

		Application No		Applicant(s)		
Office Action Summary		09/622,082		KINNUNEN ET AL.		
		Examiner		Art Unit		
		Carlos Lopez		1731		
Period fo	The MAILING DATE of this communication app	•	r sheet with the co			
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). - Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b). Status						
1)	Responsive to communication(s) filed on					
2a) <u></u> □	This action is FINAL . 2b)⊠ Thi	s action is non-f	inal.			
3)	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.					
Disposition	on of Claims					
4)🛛	Claim(s) <u>1-15</u> is/are pending in the application.					
4	a) Of the above claim(s) is/are withdraw	n from consider	ation.			
5)	Claim(s) is/are allowed.					
6)⊠	Claim(s) <u>1-15</u> is/are rejected.					
7)	Claim(s) is/are objected to.					
8)	Claim(s) are subject to restriction and/or	election require	ment.			
Application	on Papers					
9)☐ The specification is objected to by the Examiner.						
10)⊠ The drawing(s) filed on <u>22 September 2000</u> is/are: a)⊠ accepted or b) objected to by the Examiner.						
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
11) ☐ The proposed drawing correction filed on is: a) ☐ approved b) ☐ disapproved by the Examiner.						
If approved, corrected drawings are required in reply to this Office action.						
12) The oath or declaration is objected to by the Examiner.						
Priority u	nder 35 U.S.C. §§ 119 and 120					
13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).						
a)[∑	☑All b)☐ Some * c)☐ None of:					
	 Certified copies of the priority documents 	have been rece	eived.			
:	2. Certified copies of the priority documents	have been rece	ived in Applicatio	n No		
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. 						
14) 🗌 Ad	14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).					
a) ☐ The translation of the foreign language provisional application has been received. 15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.						
Attachment(, ,				
2) 🔲 Notice	of References Cited (PTO-892) of Draftsperson's Patent Drawing Review (PTO-948) ation Disclosure Statement(s) (PTO-1449) Paper No(s) <u>5</u> .	4)		PTO-413) Paper No(s) stent Application (PTO-152)		
0.0	1. 1.67					

DETAILED ACTION

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

1) Claims 1-15 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The terms "admixture" and "admixture layer" are indefinite terms not well defined in applicant's specification. In pages 5-7, applicant has failed to clearly define what an "admixture" is. Is the "admixture" a chemical? Recycled pulp? Additionally, in pages 5-7, applicant's fails to maintain consistency terminology in referring to an "admixture" as an "agent" or "solution". Furthermore it's unclear what is an "admixture layer". In page 5 lines 5-15, an admixture layer is defined as a mixture of "admixture" and fresh stock. However, in page 5 lines 25-30, defines an admixture layer as a layer of starch, and optionally being fillers, fines, retention agents, etc.

For examination purposes, an "admixture" will be defined as pulp or any additive used in the papermaking industry and "layering of admixture" (applicant's claim 4) or "a layer of an admixture" (applicant's claim 14) being a layer comprising pulp or any additive used in the papermaking industry.

In claim 4, it's unclear what is an "upper-wire unit". Is an "upper-wire unit" a gap former? A machine screen?

Claim 8 recites "said admixture <u>being adapted</u>..." It is at the least incompletely defined as to how the mixture is adapted to increase the fines. Additionally, "said fines" lacks antecedent basis.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 2) Claims 1-4, 6-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schmaeng (US 4021295). Schmaeng discloses a method of layering an admixture in a web former unit in which two or more webs are formed by means of separate web former units (Fig 1). Three component stock flows (30a-c) and admixture flows (20 a-c) are added to said component flow (30a-c) forming a face that will be placed against and combined with the face of a web formed by another web former unit (units 50a-c) (Fig. 1). The admixture (20 a-c) being added after a pump (14) (Fig. 1). The admixture being white water (Column 3, In. 21). Claims 2 and 9, recite papermaking additives well known in the papermaking art as being present in white water. Regarding claims 4 and 11, the layering of the admixture will take place in an upper wire unit 54a (Fig. 1). As for claims 6, 7, 14 and 15, a multi-layered paperboard would obviously be created. Applicant's claim 1, additionally recites a flow of fresh stock being divided into at least two stock flows. Applicant's claims 3 and 10 additionally recite dividing the flow of fresh stock into three component flows. Schmaeng is

silent on dividing a fresh stock into component flows and only discloses three stock chest (24 a-c) to provide separate stock flows (30a-c). At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to have replaced Schmaeng's three fresh stock chest system with a common fresh stock flow divided into three component flows. Applicant has not disclosed that a fresh stock flow divided into at least two component flows provides an advantage, is used for a particular purpose and/or solves a stated problem. One of ordinary skill in the art, furthermore, would have expected Applicant's invention to perform equally well with a three fresh stock system because it essentially provides the same fresh stock to a multi-layered headbox irrelevant if stock flow is divided into two or three component flows. Therefore, it would have been obvious to one of ordinary skill in this art to have modified Schmaeng's three fresh stock chest system to obtain the invention as recited in the above claims.

Over Schmaeng (US 4021295) and in view of Grossmann et al (US 5607555). As stated above, Schmaeng discloses a method of layering an admixture in a web former unit in which two or more webs are formed by means of separate web former units in a multi-layered headbox. Claim 5 additionally recites combining an additional web from a second combination of headbox and gap former. However, Grossmann discloses a method of adding an additional web via a second headbox and gap former and teaches that such assembly produces a very uniform paper; less dispersion of strength values and a better constancy of

the base weight profile (Column 1, Ins. 64-67). At the time the invention was made it would have been obvious to a person of ordinary skill in the art to have used Schmaeng's method with Grossmann teachings because uniformity, dispersion of strength values and constancy are improved.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Carlos Lopez whose telephone number is (703) 605-1174. The examiner can normally be reached on Mon. - Fri. 8am-5pm (EST).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stanley Silverman can be reached on (703) 308-3837. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 305-7718 for regular communications and (703) 305-3599 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308- 0651.

C.L July 26, 2001

PETER CHIN
PRIMARY EXAMINER